Claims

1 Use of a composition comprising HPV 16 and HPV 18 VLPs in the preparation of a medicament for the prevention of infection and/or disease caused by one or more of the group of oncogenic HPV types, the group excluding types HPV 16 and HPV 18.

2 Use of a composition according to claim 1 for the prevention of infection and/or disease by one or more of the group of HPV types 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66,68.

3 Use according to claim 2 for prevention of infection and/or disease by one or more of the group of HPV 31, HPV 33, HPV 35, HPV 52 and HPV 58.

4 Use according to claim 3 for prevention of infection and/or disease by one or more of the group of HPV 31, HPV 35, and HPV 58.

5 Use according to any preceding claim wherein the extent of prevention is determined by comparing a vaccinated population with a non-vaccinated population (placebo group) in respect of all members of the group of HPV types.

6 Use according to any preceding claim wherein the prevention afforded is at least 15% better than a placebo.

7 Use according to any preceding claim wherein the HPV VLPs are combined with an adjuvant.

8 Use according to claim 7 wherein the adjuvant is a combination of an aluminium salt and 3D-MPL.

9 Use according to claim 8 wherein the adjuvant is a combination of an aluminium hydroxide and 3D MPL.

10 Use according to any preceding claim wherein the VLP comprises an L1 protein or immunogenic fragment thereof but no L2 protein.

11 A method of inducing an immune response against one or more of the group of oncogenic HPV types, the group excluding types HPV 16 and HPV 18, the method comprising administering to a subject a composition comprising an HPV16 VLP and an HPV 18 VLP.

12 A method for preventing infection and/or disease caused by one or more of the group of oncogenic HPV types, the group excluding types HPV 16 and HPV 18, the method comprising administering to a subject a composition comprising an HPV16 VLP and an HPV 18 VLP.

13 The method of Claim 11 or 12 wherein the HPV types are selected from the group consisting of types 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66 and 68.

14 The method of any of claims 11 – 13 wherein the HPV types are selected from the group consisting of HPV types HPV31, HPV33, HPV35, HPV52 and HPV58.

15 The method of any of claims 11- 14 wherein the HPV types are selected from the group consisting of HPV31, HPV35 and HPV58.

16 The method of any of claims 11-15 wherein the composition further comprises an adjuvant.

17 The method of Claim 16 wherein the adjuvant comprises an aluminum salt and 3D MPL.

18 The method of Claim 17 wherein the aluminum salt is aluminum hydroxide.

19 A method for preventing infection of a population of subjects by one or more HPV types selected from the group consisting of oncogenic HPV types, excluding types 16 and 18, the method comprising administering to a subject a composition comprising an HPV16 VLP

and an HPV 18 VLP, wherein administration of the composition prevents infection and or disease in up to or at least 15% more of the population than administration of a placebo.

20 Use of a mixture of HPV 16 and HPV18 VLPs in the preparation of a medicament for the prevention of infection and/or disease in a group of humans by the group of oncogenic HPV types excluding types 16 and 18, wherein the level of infection and/or disease seen in the group is significantly lower than that which is seen with a placebo.

21 A vaccine composition comprising an HPV16 VLP and an HPV 18 VLP which is cross protective against infection and/or disease caused by oncogenic HPV types other than type 16 and 18.